



LearnDelphi.org

Coding Boot Camp



learndelphi.org/boot-camp-2022





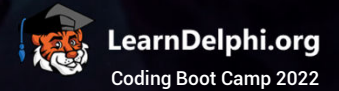
LearnDelphi.org


Session : Core 25

Working with REST APIs



About Aubrey Pule Khoza



- Lecturer at the department of Computer Science at the Tshwane University of Technology in South Africa
- Passionate about Delphi since Borland Delphi 6
- Software Engineer in various industry projects
- Lives in Pretoria (South Africa) 
- Cricket Fan



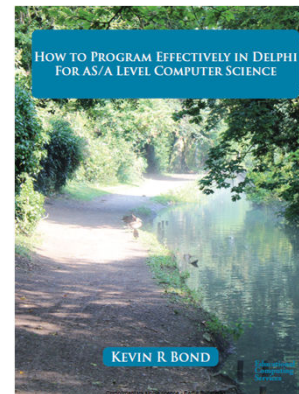
Session outline



LearnDelphi.org
Coding Boot Camp 2022


- Understanding REST Web Services
- Consuming Web Services
- Web Service Examples
- MusicDelphi Application Tutorial


Textbook reference chapters




Chapters 68 to 72



 SessionXX

 Extras

 Presentation

 Sample_Applications

Web Services

- Web services are application blocks that can be published online and made available to the rest of the world for consumption.
- Instead of reinventing the wheel and recreating the same solution by multiple organizations, these organizations can access and use a prebuilt application component.
- In this Session, we will use the “getartist” web service available online from last.fm which will allow us to get artist information for artists around the world.



Consuming Web Services

- We consume web services by using the **operations** that they provide
- Delphi makes it easier to consume web service by automatically extracting web service information and creating classes and interfaces that you can use to consume web service methods



Last-FM get-artist Web Service



LearnDelphi.org
Coding Boot Camp 2022

last.fm

🔍 Live Music Charts

artist.getInfo

Get the metadata for an artist. Includes biography, truncated at 300 characters.

Example URLs

JSON: `/2.0/?method=artist.getInfo&artist=Cher&api_key=YOUR_API_KEY&format=json` [🔗](#)

XML: `/2.0/?method=artist.getInfo&artist=Cher&api_key=YOUR_API_KEY` [🔗](#)

Params

artist (Required (unless mbid)) : The artist name

mbid (Optional) : The musicbrainz id for the artist

lang (Optional) : The language to return the biography in, expressed as an ISO 639 alpha-2 code.

autocorrect[0|1] (Optional) : Transform misspelled artist names into correct artist names, returning the correct version instead. The corrected artist name will be returned in the response.

username (Optional) : The username for the context of the request. If supplied, the user's playcount for this artist is included in the response.

api_key (Required) : A Last.fm API key.

Auth

This service does **not** require authentication.



Last-FM get-artist Web Service



LearnDelphi.org
Coding Boot Camp 2022

Sample Response

```
<artist>
  <name>Cher</name>
  <mbid>bfc6d75-a6a5-4bc6-8282-47aec8531818</mbid>
  <url>http://www.last.fm/music/Cher</url>
  <image size="small">http://userserve-ak.last.fm/serve/50/285717.jpg</image>
  <image size="medium">http://userserve-ak.last.fm/serve/85/285717.jpg</image>
  <image size="large">http://userserve-ak.last.fm/serve/160/285717.jpg</image>
  <streamable>1</streamable>
  <stats>
    <listeners>196440</listeners>
    <plays>1599101</plays>
  </stats>
  <similar>
    <artist>
      <name>Madonna</name>
      <url>http://www.last.fm/music/Madonna</url>
      <image size="small">http://userserve-ak.last.fm/serve/50/5112299.jpg</image>
      <image size="medium">http://userserve-ak.last.fm/serve/85/5112299.jpg</image>
      <image size="large">http://userserve-ak.last.fm/serve/160/5112299.jpg</image>
    </artist>
    ...
  </similar>
  <tags>
    <tag>
      <name>pop</name>
      <url>http://www.last.fm/tag/pop</url>
    </tag>
    ...
  </tags>
  <bio>
    <published>Thu, 13 Mar 2008 03:59:18 +0000</published>
    <summary>...</summary>
    <content>...</content>
  </bio>
</artist>
```



String Grid for Music Delphi



LearnDelphi.org
Coding Boot Camp 2022

Music Delphi

Artist Statistics

XML and JSON


Artist Information

Close

Britney Spears

Search

Britney Spears



Year Formed

1998

Listeners

3011792

Play Count

175996317

Britney Jean Spears (born on December 2, 1981 in Kentwood, LA, United States, and raised in Kentwood, Louisiana, United States) is a Grammy-winning multi-platinum American [pop](http://www.last.fm/tag/pop) singer, songwriter, dancer and occasional actress. She debuted in 1998 with her single [...Baby One More Time](http://www.last.fm/music/Britney+Spears/_/...Baby+One+More+Time). She is one of the most influential and popular post-2000 icons of music. Spears is one of the few young musicians to appear on lists of best selling music acts of all-time. She also holds several world records.

[Read more about Britney Spears on Last.fm](http://www.last.fm/music/Britney+Spears).







LearnDelphi.org

Thank you!



Get the code:
github.com/Embarcadero/CodingBootCamp2022

